Advantages

- Acts as buffering agent and stabilizes soil pH
- Improves soil organic carbon, soil organic matter, available N, P, K and micronutrients
- Enhances the microbial biomass and organic carbon in soil which is an indicator of sustenance of soil fertility and health
- Improves nitrogen fixation and mineralization
- Improves bulk density and water holding capacity of soil
- Improves nutrient retention in soil and their slow release to plants
- Corrects the nutrient deficiencies of both macro and micro nutrients
- Improves growth of mulberry plants
- Improves leaf yield by 14 %
- Improves cocoon weight, shell weight and silk percentage
- **Ankur** is cost effective and eco-friendly technology

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ANKUR

A Nutrient Supplement for Soil Fertility and Soil Health

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ANKUR –A Nutrient Supplement for Soil Fertility and Soil Health

Mulberry is a perennial plant with high biomass production. Quality of leaf plays an important role in mulberry sericulture and it mainly depends on the availability of nutrients present in the soil. Adoption of high production technology and cultivation of high yielding varieties have depleted soil nutrient reserves and also caused their imbalances in soil. Hence supply of high doses of fertilizers is needed to maintain sustained growth and quality leaf production. Soils which receive plant nutrients only through fertilizers are showing declining productivity despite addition of sufficient nutrients. The decline in productivity may result from deficiencies in secondary and micronutrients.

Further, the physical condition of the soil is deteriorated as a result of long-term use of only chemical fertilizers. This also results in the degradation of soils with a decrease in soil organic matter and loss of soil structure. All these factors lead to reduction in mulberry leaf productivity. To overcome these constraints, balanced nutrition with organic and inorganic sources is essential to maintain leaf productivity and soil fertility.

Several foliar nutrient supplements are available for nutrient management in mulberry, but there is no soil nutrient supplement that contains both organic and inorganic nutrients. Supplementation of soil with organic and inorganic mixture is one of the avenues for improving mulberry productivity

Ankur is a combined organic and inorganic soil application nutrient supplement developed by Seri-Con Technologies, Bengaluru for improving soil fertility and health, besides improving mulberry leaf production. The product was evaluated at CSRTI-Mysuru farm for its effects on soil properties, leaf yield and cocoon yield. The **Ankur** application recorded higher soil organic carbon content (0.72%), soil organic matter (1.24%), leaf yield (22860 kg/ac/year) and cocoon yield (73 kg/100 dfls).

Treat-ments	Organic carbon (%)	Organic matter (%)	Leaf yield (kg/ac/ yr)	Cocoon yield/ 100 dfls (kg)
Ankur	0.72	1.24	22860	72.9
Control	0.67	1.15	20054	65.5

Method of Application

- For one acre mulberry apply 10 kg **Ankur** soil mixture per crop
- **Ankur** mixture should be thoroughly mixed with FYM @ 100 kg/acre/crop or fine earth for uniform application in the field
- The mixture should be applied after pruning of mulberry plants
- Irrigation should be ensured after application of **Ankur**
- The chemical fertilizers and manures should be applied as per the recommendations